

What is claimed is:

1. A method for manufacturing a compound semiconductor substrate, comprising the steps of:
 - (a) epitaxially growing a compound semiconductor functional layer 2 on a substrate 1,
 - (b) bonding a support substrate 3 to the compound semiconductor functional layer 2,
 - (c) polishing the substrate 1 and a part of the compound semiconductor functional layer 2 on the side which is in contact with the substrate 1, to remove them,
 - (d) bonding a thermally conductive substrate 4 having a thermal conductivity higher than that of the substrate 1 to the exposed surface of the compound semiconductor functional layer 2 which is provided in the step (c) to obtain a multilayer substrate and
 - (d) separating the support substrate 3 from the multilayer substrate.
2. The method according to claim 1, wherein the compound semiconductor functional layer 2 includes at least two layers.
3. The method according to claim 1 or 2, wherein the compound semiconductor functional layer 2 includes at least one selected from the group consisting of In, Ga, and Al and at least one selected from the group consisting of N, P, As, and Sb.

4. The method according to any one of claims 1 to 3, wherein
the thermally conductive substrate 4 includes at least one
selected from the group consisting of Al, Cu, Fe, Mo, W,
diamond, SiC, AlN, BN, and Si.
5. A method for manufacturing a compound semiconductor
substrate, comprising the steps of:
(f) epitaxially growing a compound semiconductor functional
layer 22 on a substrate 21,
(g) bonding a thermally conductive substrate 23 having a
thermal conductivity higher than that of the substrate 21
to the surface of the compound semiconductor functional
layer 22 and
(h) polishing the substrate 21 and a part of the compound
semiconductor functional layer 22 on the side which is in
contact with the substrate 21 to remove them.
6. The method according to claim 5, wherein the compound
semiconductor functional layer 2 includes at least two
layers.
7. The method according to claim 5 or 6, wherein the compound
semiconductor functional layer 2 includes at least one
selected from the group consisting of In, Ga, and Al and at
least one selected from the group consisting of N, P, As,
and Sb.
8. The method according to any one of claims 5 to 7, wherein
the thermally conductive substrate 23 includes at least one

selected from the group consisting of Al, Cu, Fe, Mo, W, diamond, SiC, AlN, BN, and Si.

9. A method for manufacturing a electronic device, comprising the steps in the method according to any one of claims 1 to 8 and a step of forming an electrode on the resultant compound semiconductor substrate.